Volume 86, Number 4 October 1992

Supplement to Circulation

Abstracts From the 65th Scientific Sessions
New Orleans Convention Center
New Orleans, Louisiana
November 16–19, 1992

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Note: Abstract numbers are arranged to coincide with abstract titles in the *American Heart Association's 65th Scientific Sessions Program.*

Subject and author indexes are keyed to abstract numbers, not page numbers. However, all Named and Invited Lectures and all Young Investigator Award/Prize Abstracts are keyed to page numbers within this supplement. Indexes are located at the back of this supplement. All other supplements to this volume of *Circulation* will be indexed in the December issue.

CIRCULATION (ISSN 0009-7322) is published monthly by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231-4596. For rates in Japan, contact Nankodo Co., Ltd., 42-6 Hongo 3-chome, Bunkyo-ku, Tokyo 113, Japan. In the United States, individuals may subscribe for their personal use at the following rates: $82 for members of an American Heart Association scientific council and $102 for nonmembers. Outside the United States, add $80 for postage. Contact AHA for single copy rates and subscription rates for medical professionals in training and for libraries, reading rooms, and other multiple-use institutions. Second class postage paid at Dallas, Texas, and additional mailing offices. POSTMASTER: Send address changes to CIRCULATION, American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231-4596.

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CIRCULATION 86(4), 1992
SUPPLEMENT

Reduced Plasma Ascorbic Acid Concentrations in Women Regularly Exposed to Environmental Tobacco Smoke (ETS).

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Oxidative processes have been implicated in the pathogenesis of heart disease, offering a potential explanation for the high risk attributable to smoking. Cigarette smoke contains numerous oxidants, and smokers exhibit reduced circulating concentrations of the antioxidant vitamin ascorbic acid (AA), primarily as a result of oxidant-mediated depletion although reduced dietary intake also has been noted. We measured plasma AA concentrations and dietary AA intake in nonsmoking women exposed to ≥20 hr/wk ETS, i.e., passive smokers (PS), as compared with nonsmokers with ≤2 hrs ETS exposure/wk (NS) and active smokers (AS), to assess whether PS also may exhibit suboptimal AA nutriture. Plasma AA was measured by HPLC with electrochemical detection, and dietary and vitamin supplement AA intakes were assessed using a semi-quantitative food frequency questionnaire.

Results:	NS(n=46)	PS(n=27)	AS(n=33)
Cigs/d	0	0	24.5±5.4**
ETS exposure (hr/wk)	0.2±0.6	35.3±12.9**‖	20.7±20.4**
Plasma AA (μM)	69.4±21.3	51.9±23.3**	42.3±20.2**
Dietary AA (mg/d)	129.8±79.1	117.4±56.2*	129.8±79.1
Suppl. AA (mg/d)	152.0±254.9	203.5±789.5	184.4±311.6

NS vs. PS or AS: *p<.05; **p<.001; PS vs. AS: ‖p<.001.

Both PS and AS exhibited reduced plasma AA relative to NS. One (-2%) NS, 4 (-15%) PS, and 6 (-18%) AS exhibited hypovitaminosis C (plasma AA<23 μM). Reduced plasma AA in PS may be partially due to reduced dietary AA. These results suggest that suboptimal AA nutriture may contribute to increased heart disease risk associated with ETS exposure.

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